

ZONITH Input Module

The ZONITH® Input Module is used for monitoring digital alarm input signals from 3rd party alarm panels and technical installations. The alarm signals are wirelessly transmitted to the ZONITH® Gateway and from there passed over to the ZONITH server solution. The ZONITH® Input module can either be powered with batteries or external power supply.

Dimensions

Size: W: 67 x L: 90 x H 16 mm
Weight: 72g (with batteries)

Bluetooth Technical Data

BLE4.0/BLE4.1

Country of Origin

Taiwan

External Power

+3V to 12V DC

Temperatures

Working: -10°C to +50°C
Storage: 10°C to +40°C

Range

Max distance to ZONITH Gateway: 15 - 20 meters (49 – 65 feet) in open space

Batteries (Not included)

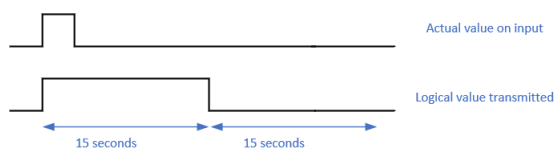
3 pcs. CR2477 (non-chargeable, replaceable) The estimated battery lifetime depends on the number of inputs being in HIGH state. If no inputs in HIGH state, the estimated lifetime is 2 years. If one input constantly in HIGH state, the estimated battery lifetime is 1 year.

Estimations based on room temperature [20°C]. Colder environments will affect the battery lifetime. Disposal of the used battery must be done following the local regulations.

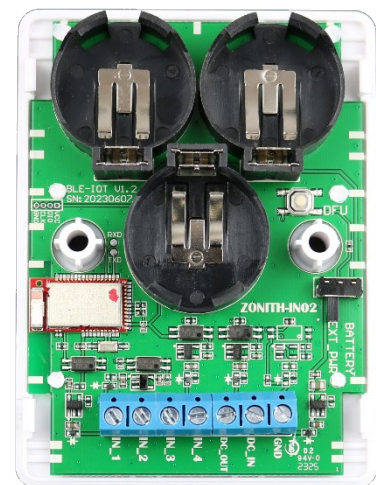
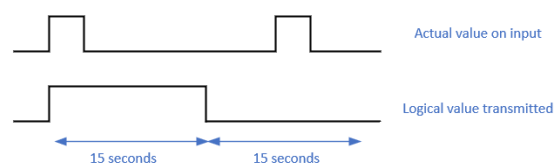
Input Signals

4 Digital Input signals +3V to +12V DC

When an input changes value the system keeps the alarm state for 15 seconds to ensure that the change is captured by the ZONITH® solution. After this period the actual value of the input is compared to the value that triggered the change. If this is different, then it locks the logical value for 15 seconds again to ensure that the ZONITH® Alarm handling platform received this change again.

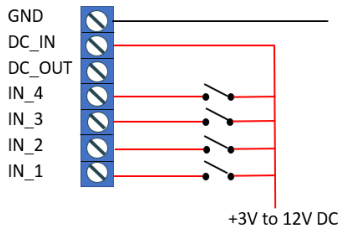


The alarm state is triggered immediately when the change is detected. The locking of logical values for 15 seconds periods can discard some pulses as illustrated below:



Wiring with External Power Supply

If the ZONITH® Input Module is supplied by external power, by supplying +3V to +12V DC to the DC_IN connector, the wiring shall go like:



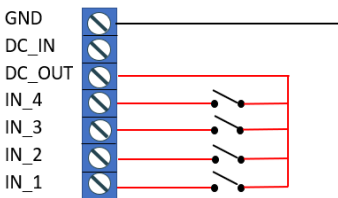
Each digital input shall be supplied with a voltage between +3V and +12V DC to set the input high. GND shall be connected as common ground.

To operate the ZONITH® Input Module with external power the switch to the right of the board shall be set to “EXT_PWR”.

NOTE: Exceeding 12V DC from external power supply will damage the ZONITH® Input Module.

Wiring with Batteries

If the ZONITH® Input Module is using battery power and operates via simple external relay contacts via DC_OUT, then the wiring shall go like:



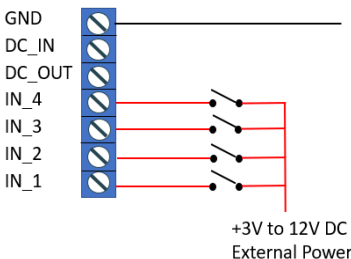
Each digital input can be supplied with voltage from DC_OUT to set the input high. GND shall be connected as common ground or not used at all.

NOTE: To avoid battery drainage the relay contacts shall be operating in Normally Open (NO) mode.

When using batteries and wiring the input signals as above shown, there is galvanic isolation between the input signals and the ZONITH® Input Module

Wiring with Batteries and External Powered Input Signals

If the ZONITH® Input Module is using battery power, but external circuitry uses external power then the wiring shall go like:



Each digital input shall be supplied with a voltage between +3V and +12V DC to set the input high. GND shall be connected as common ground. When using batteries and wiring the input signals as above shown, there is galvanic isolation between the input signals and the ZONITH® Input Module.

To operate the ZONITH® Input Module with batteries the switch to the right of the board shall be set to “BATTERY”.

NOTE: Exceeding 12V DC from external power supply will damage the ZONITH® Input Module.

Disclaimer

ZONITH A/S makes no warranties that all functionality is supported neither by the local network nor by the selected Bluetooth devices used by the system. Specifications are subject to change without notice. All product or service names are the property of their respective owners.

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